



FACT SHEET

UNDEVELOPED AREA UST FORMER BRAC PARCEL 118 FORT GREELY, ALASKA

1.0 INTRODUCTION

This fact sheet serves as an exhibit supporting the Memorandum for Record agreed to by the Alaska Department of Environmental Conservation (ADEC), the U.S. Environmental Protection Agency (EPA), and the U.S. Army Space and Missile Defense Command (SMDC).

This fact sheet describes the site generally known as the Undeveloped Area Underground Storage Tank (UST) located at Fort Greely, Alaska. The site was investigated under the recent Base Realignment and Closure (BRAC) program as Parcel 118. The following database identification applies to this site:

- ADEC Database Identification (RecKey) – 200033X135003 CS.

In a 1961 aerial photo, this site appeared to be a dump or landfill area. Evidence of former site occupation was identified, including several holes with timber shoring, vehicle parts, concrete footings for fence posts, a UST, and small metal objects. This area may have been a former training area.

2.0 SITE LOCATION

The site is located in the Northwest Undeveloped Geographic Area approximately as follows.

- Fort Greely Local Grid: Northing - 193401, Easting – 198762.
- Physical Address: Turn east from the Richardson Highway onto Big Delta Avenue. Travel east on Big Delta Avenue. Turn north on Robin Road. Travel approximately 1,000 ft north and turn west on a power line easement. Travel west on the easement approximately 1,200 ft to former BRAC Parcel 30. Travel north approximately 500 ft through a wooded area to the site.

3.0 DESCRIPTION AND FINDINGS OF SITE WORK

3.1 Listing of Documents with Site Information

The following documents contain information about this site:

1. Woodward-Clyde (24 January 1997) U.S. Army Base Realignment and Closure 95 Program, Environmental Baseline Survey Report, Fort Greely, Alaska (Table 5-1a)
2. Jacobs (September 1998) 1997 Site Investigation / Limited Remedial Investigation (pages 10-57 through 10-59)
3. Jacobs (April 1999) 1998 Remedial Investigation Report
4. Jacobs (August 2000) Summary Report, 1999 Remedial Investigation / Removal Action.

3.2 Description of Site Characterization and Remedial Actions

Pursuant to Fort Greely being selected for BRAC, an Environmental Baseline Survey (EBS) was conducted to ascertain the environmental condition of property for all surplus parcels on the installation. The EBS listed Parcel 118 as a Community Environmental Response Facilitation Act (CERFA) Category 7 parcel. Category 7 was defined as follows:

Areas that are not evaluated or require additional evaluation.

Based on EBS Table 5-1a and Table 2-1, the site was evaluated by reviewing various environmental compliance reports and other available documentation dated between 1987 and 1995.

During 1997, site reconnaissance identified holes with timber shoring (suggestive of a training area), vehicle parts, concrete footings for fence posts, a UST, and miscellaneous metal objects. No Unexploded Ordnance (UXO) or potential UXO was identified during a UXO clearance survey. A geophysical survey was conducted that identified up to nine magnetic anomalies, designated A through I.

Anomalies B, F, G, H, and I were not investigated further. Descriptions from the geophysical survey indicated the following.

- Anomaly B: A vehicle rear axle at the surface.
- Anomalies F, G, H, and I: Less than 100 lb of ferrous metal at the surface, or a larger mass at depth.

In 1998, a 1,000-gallon UST (Tank #399) was removed. Approximately 96 yd³ of Petroleum, Oil, and Lubricant (POL)-impacted soil was also removed. The excavation was backfilled. Samples were collected from the tank removal excavation. DRO (up to 3,840 mg/kg) exceeded the ADEC Method Two migration to groundwater cleanup level. GRO (92.2 mg/kg), BTEX, and lead (5.56 mg/kg) concentrations were below ADEC Method Two cleanup levels.

During 1998, anomalies A, C, D, and E were investigated further. Descriptions from the geophysical survey indicated the following.

- Anomaly A: A pair of anomalies associated with less than 100 lb of ferrous metal at the surface, or a larger mass at depth.
- Anomaly C: This anomaly was caused by a partially exposed UST and iron in timber shoring.
- Anomaly D: Surface metal associated with old battery cases.
- Anomaly E: Large anomaly associated with surface metal (scrap items) and potentially more ferrous metal at depth.

Five test pits were excavated at magnetic anomalies and two borings were drilled at the former UST location. Samples were analyzed for diesel range organics (DRO), residual range organics (RRO), gasoline range organics (GRO), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), organic compounds-pesticide (OCP), polychlorinated biphenyls (PCBs), and total metals. Arsenic was detected above the screening level in use at that time. During 1999, additional evaluation of background levels was conducted, and arsenic concentrations at Parcel 118 were resolved as background. Based on statistical analysis, surficial

lead concentrations were potentially representative of contamination. However, the maximum lead concentration was 42 mg/kg, well below the ADEC residential cleanup level. All other analytes were below the ADEC Method Two cleanup levels, including samples collected at 10 to 30 ft below ground surface (bgs) at the former UST location.

3.3 Cleanup Levels

The soil cleanup levels applied to this site are the 30 January 2003 ADEC Method Two Soil Cleanup Levels contained in 18 AAC 75.341 Tables B1 and B2 for the “Under 40-Inch” precipitation zone. ADEC Method Three or Method Four evaluation may be appropriate to establish site-specific Alternative Cleanup Levels (ACLs).

3.4 Summary of Contamination

DRO concentrations in soil at the former UST location exceed the ADEC Method Two migration to groundwater cleanup level. This contamination extends less than 10 ft bgs. Four small geophysical anomalies, each representative of less than 100 lb of surface ferrous metal, or more at depth, were not investigated.

4.0 SITE STATUS AND REMEDY

After discussion with ADEC and the EPA the status of this site has not been resolved. The decision on site status will follow further studies of the migration pathway of contaminants to groundwater. Past studies and modeling using SESOIL indicated that contamination from this site would not migrate to groundwater but recent detections of trichloroethene (TCE) and benzene in groundwater at another site where SESOIL predicted similar results have caused concern. Once the migration to groundwater pathway is better understood, the following actions will likely be or already have been conducted at this site.

1. Administrative Controls (ACs) have been established for this site in order to minimize risk to human health and the environment. The site is included in the post’s Geographic Information System (GIS), a tool used in the Dig Permit process for notifying contractors, workers, and base personnel of the potential for contamination to exist at this site. The Dig Permit process is used to prevent installation of water production well(s) through the contaminated area, and prevent removal of contaminated material from the site to off-base locations or to environmentally sensitive areas. If future land disturbance activities at the site encounter contamination, the contaminated material encountered will be properly remediated or disposed of in accordance with applicable regulations.

2. The site will be included in 5-year reviews to periodically verify compliance with the ACs.

3. An ADEC Method Three evaluation may be conducted to establish an ACL for DRO migration to groundwater at this site.